

Figure 1

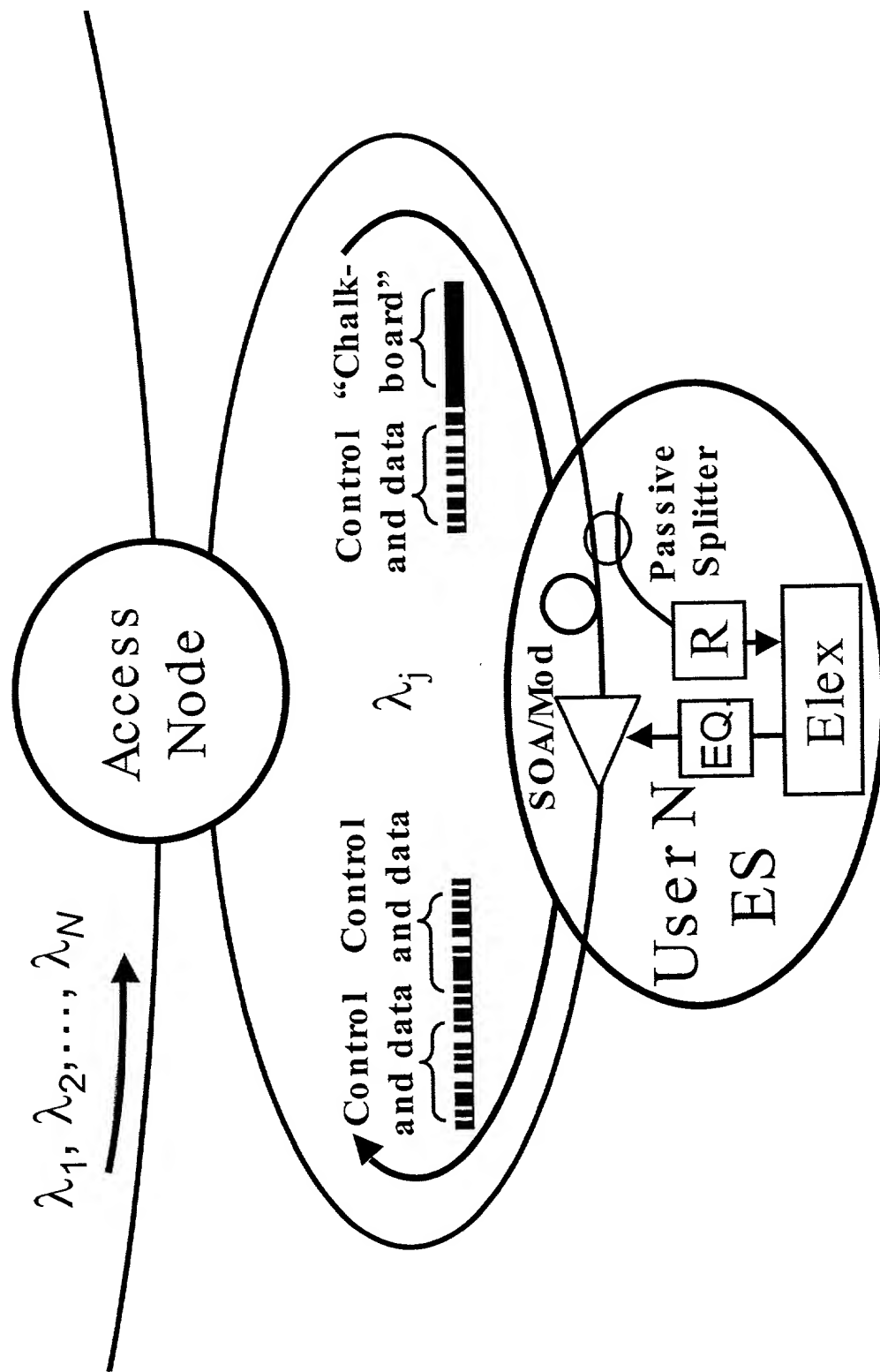


Figure 2

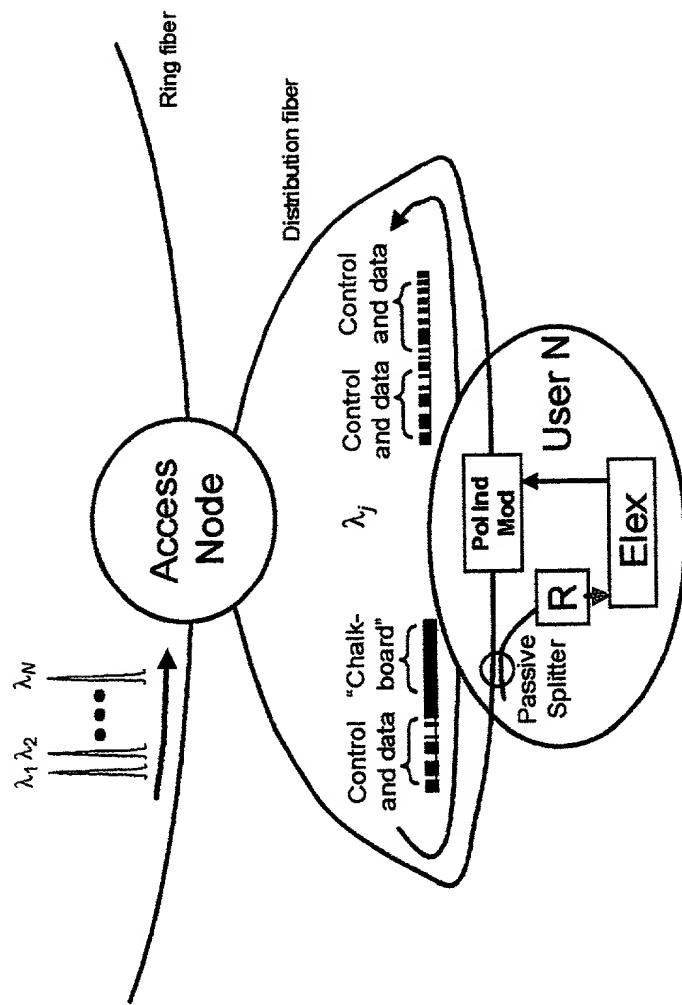


Fig 2b

$W = \{w_1, w_2, \dots, w_n\}$
 $\lambda_1 = \{w_1, w_2, \dots, w_n\}$
 $\lambda_2 = \{w_1, w_2, \dots, w_n\}$

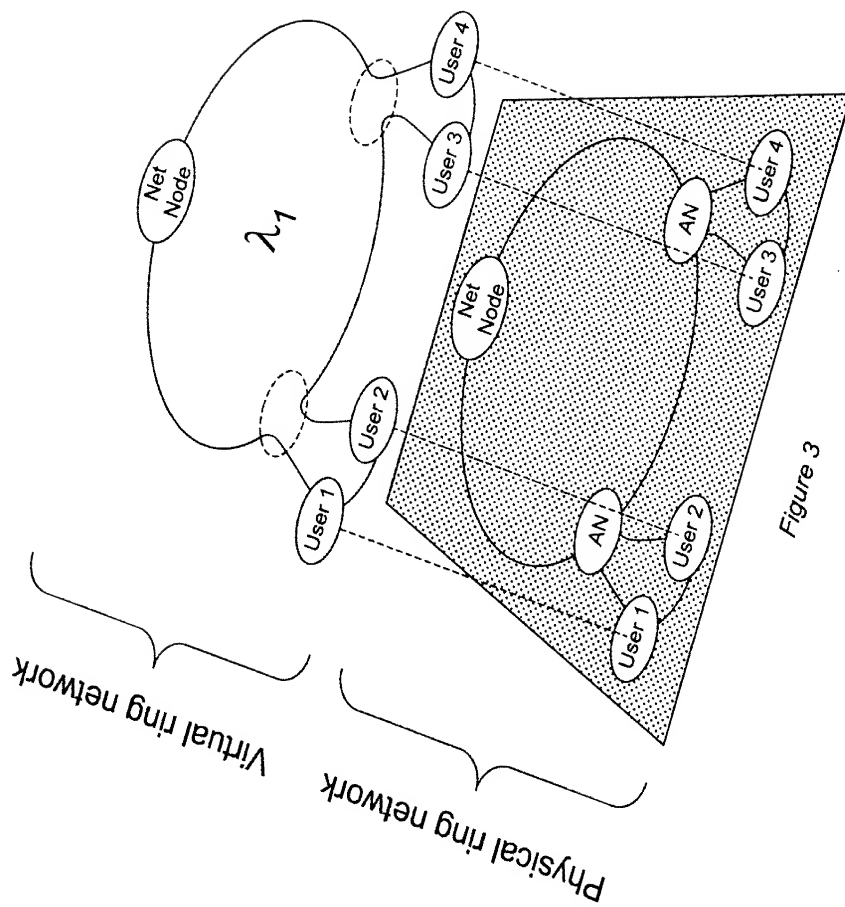


Figure 3

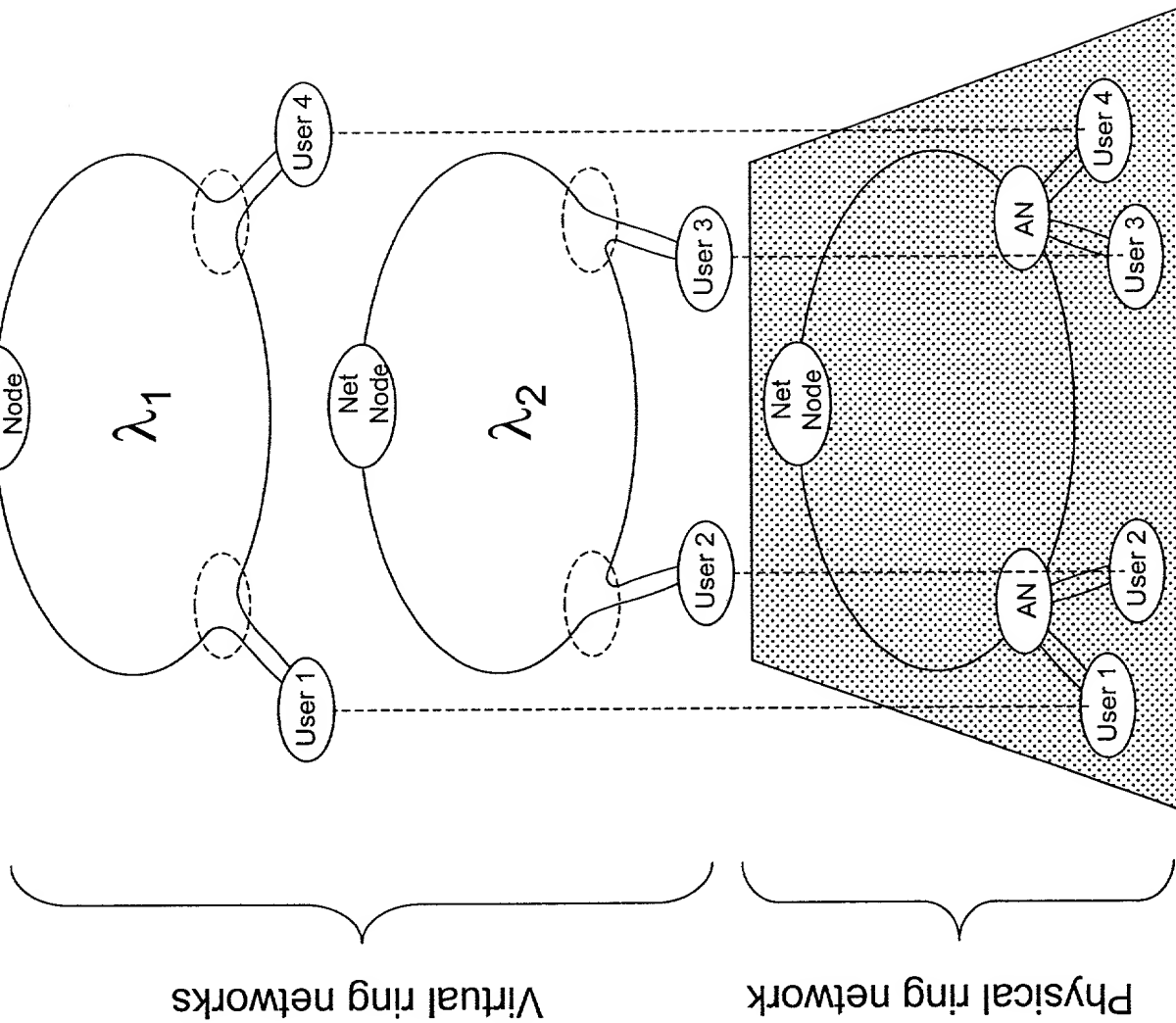


Figure 4

Virtual ring networks

Physical ring network

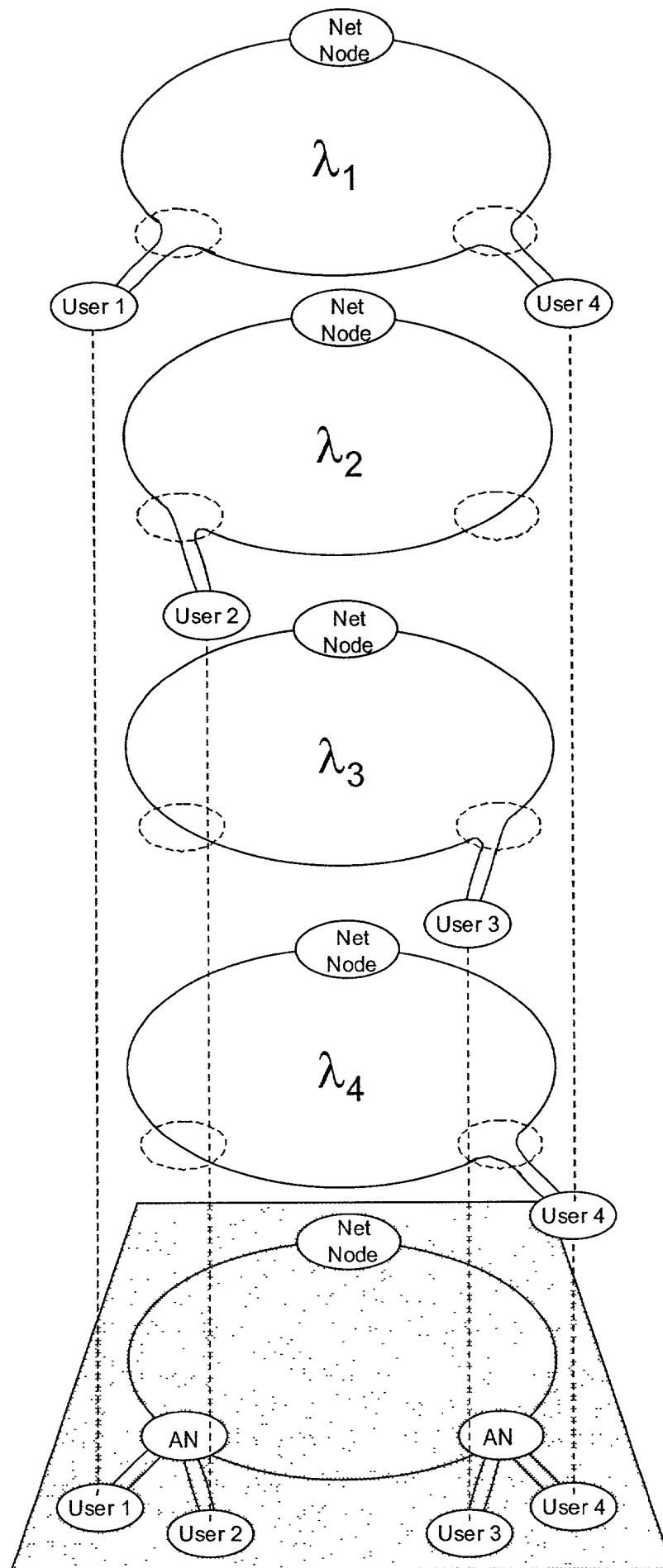


Figure 5

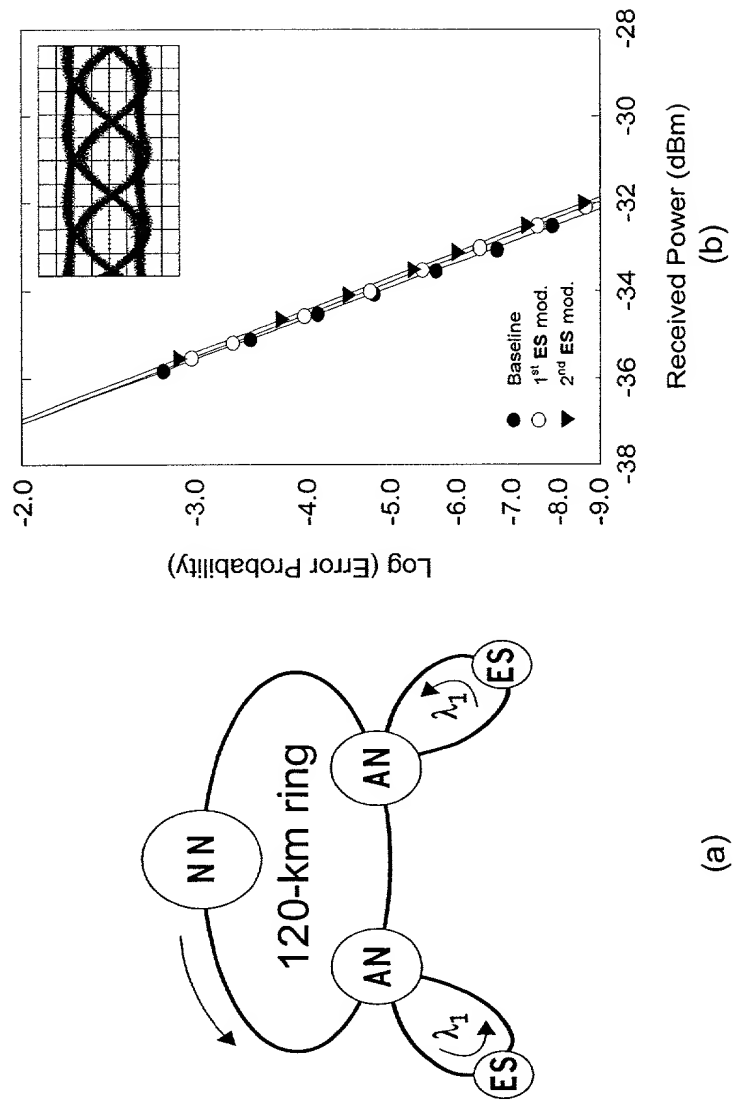


Figure 6

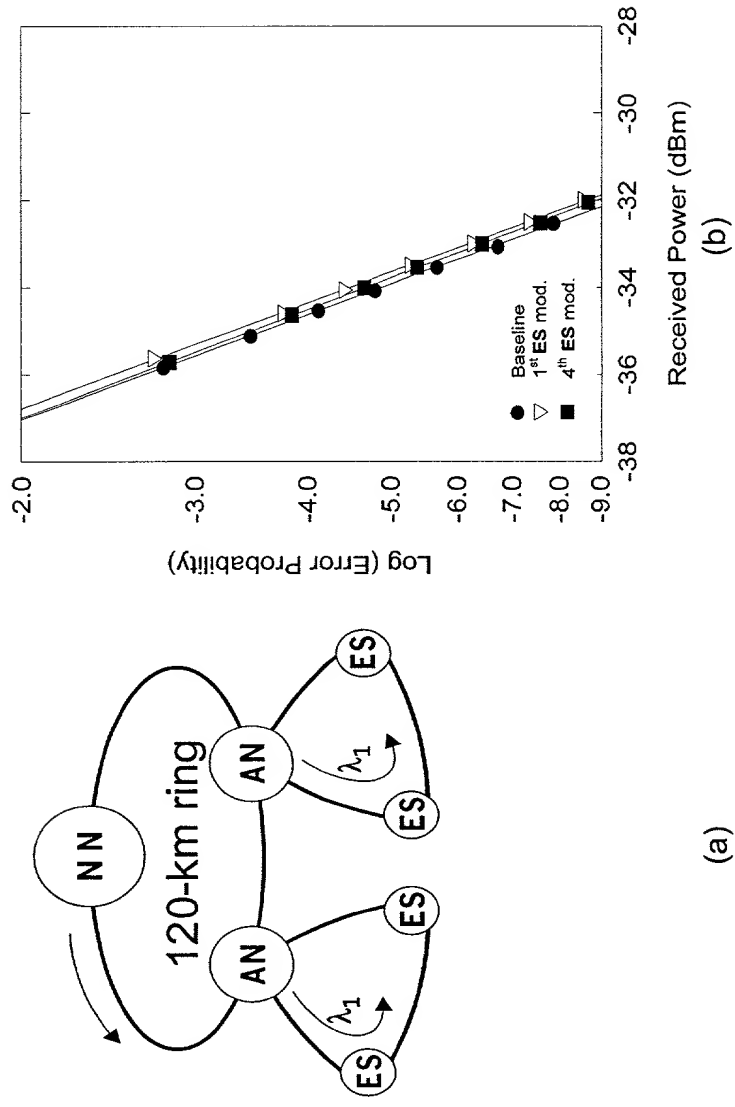


Figure 7

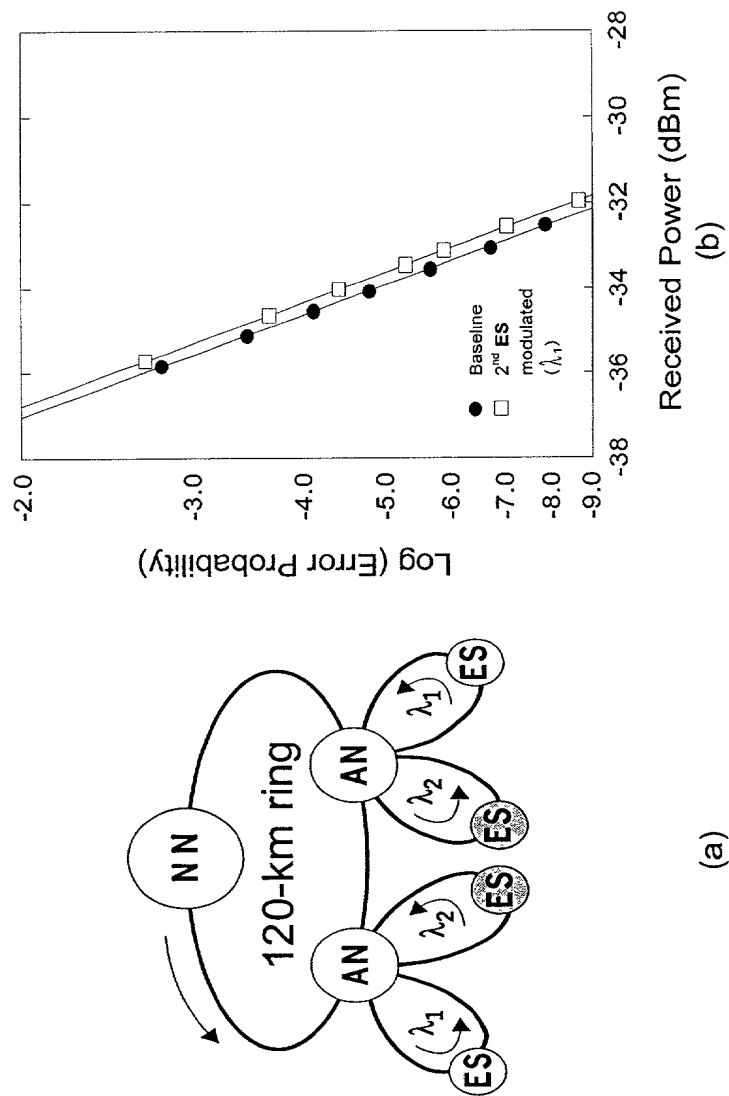


Figure 8

Figure 9

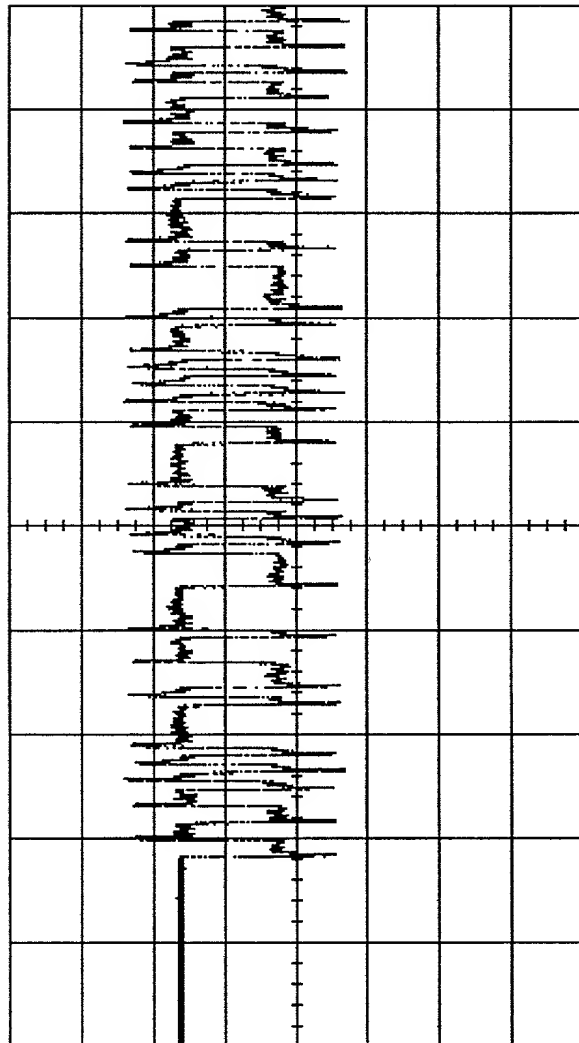


Figure 9

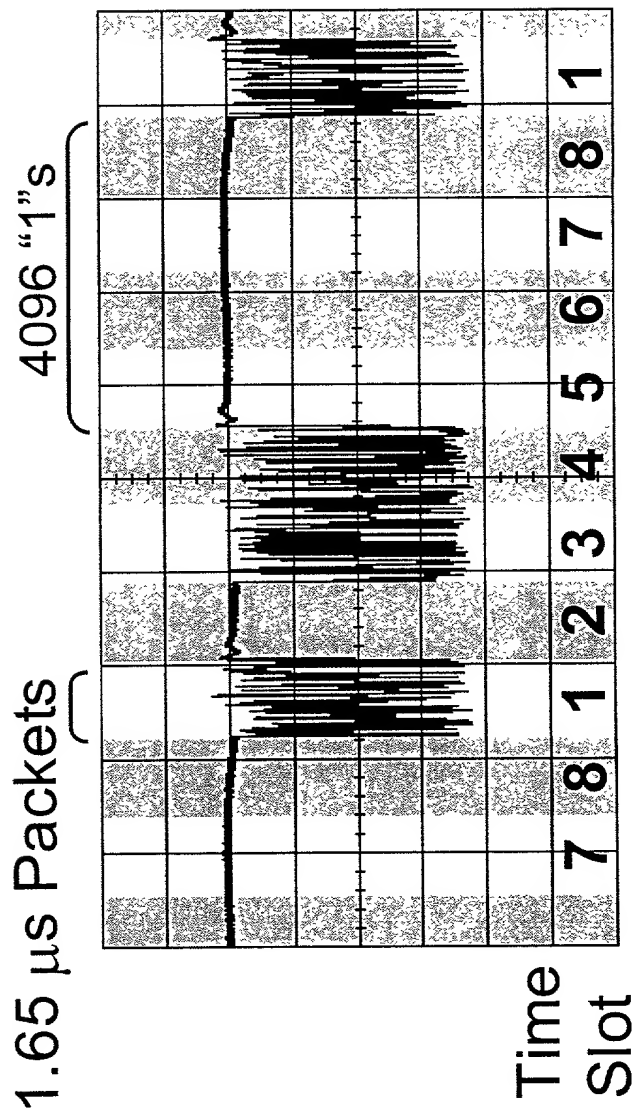


Figure 10

FOOT 20" 4452050

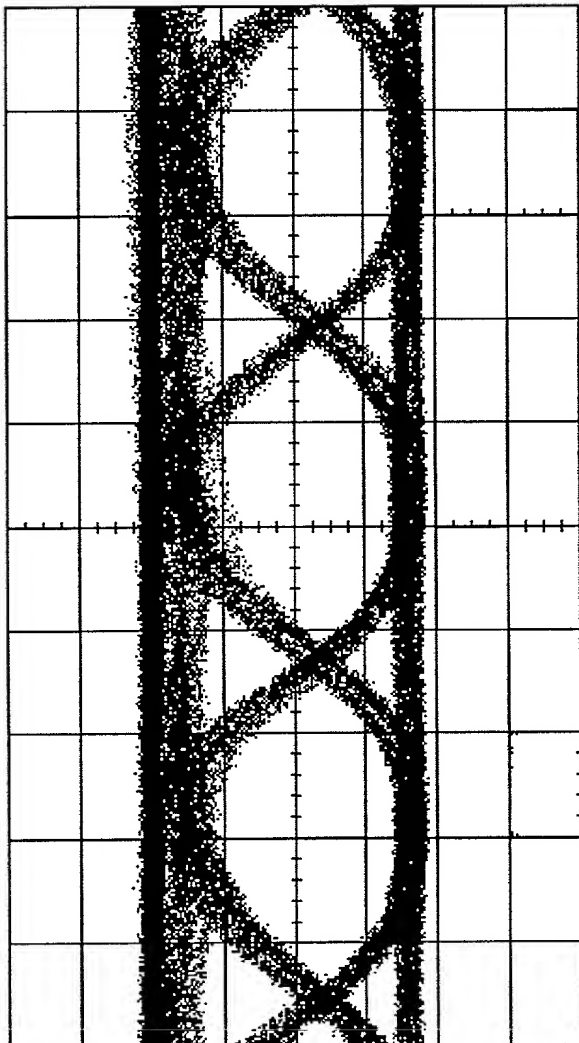


Figure 11

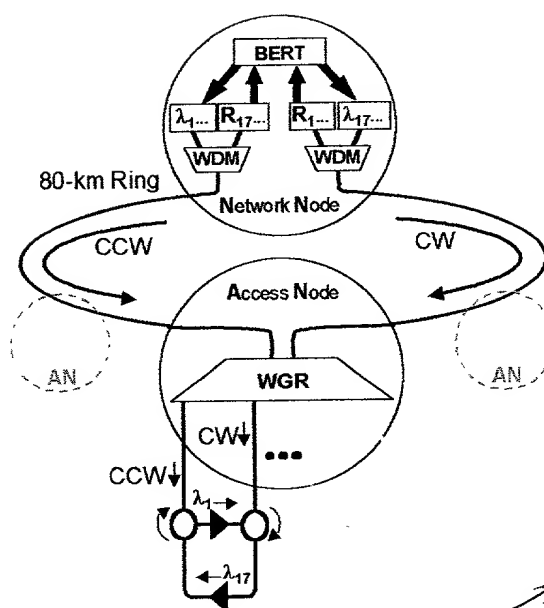
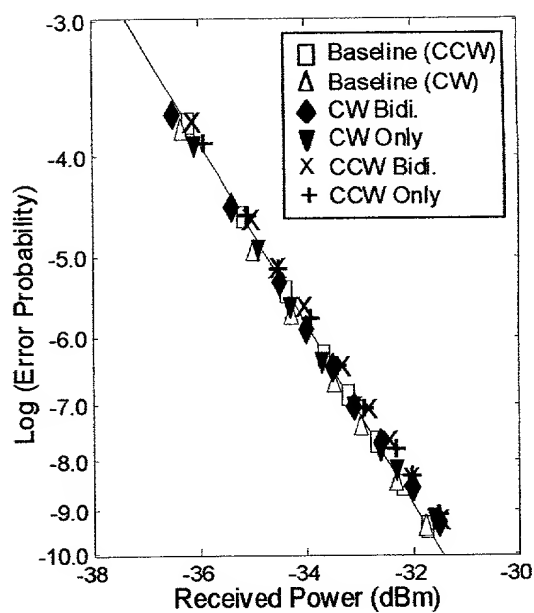


Figure 12a

Figure 12 ~~2~~ C

Bi-directional Single-Fiber Ring

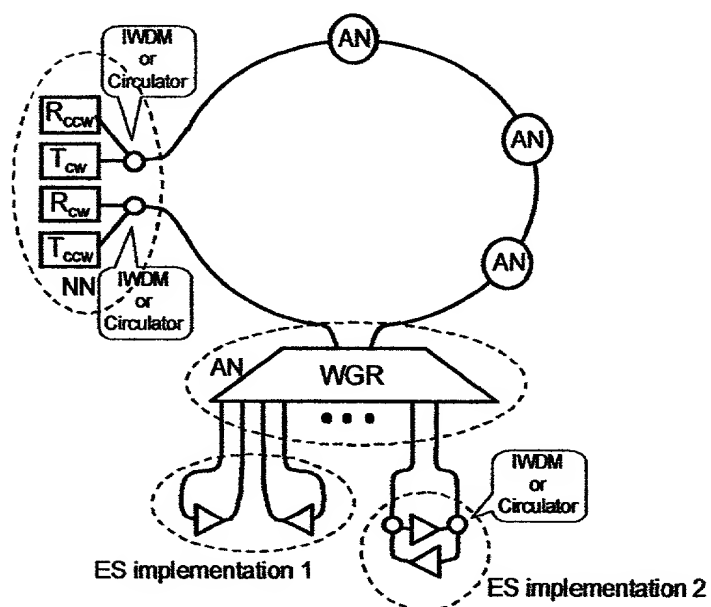


Fig 12b